This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Director, Charting and Geodetic Services (N/CG22), National Ocean Service, NOAA, Rockville, Maryland 20852.

NOTE X
TERRITORIAL SEA AND CONTIGUOUS ZONE

The lines delimiting the territorial sea and contiguous zone represent an interdepartmental committee's interpretation of legal principles as applied to geographical information. The lines are subject to revision when required by correction of the geographic information shown or by reinterpretation of the legal principles involved. Where differences occur between adjacent or overlapping charts, the lines shown on the most recent chart issue take precedence.

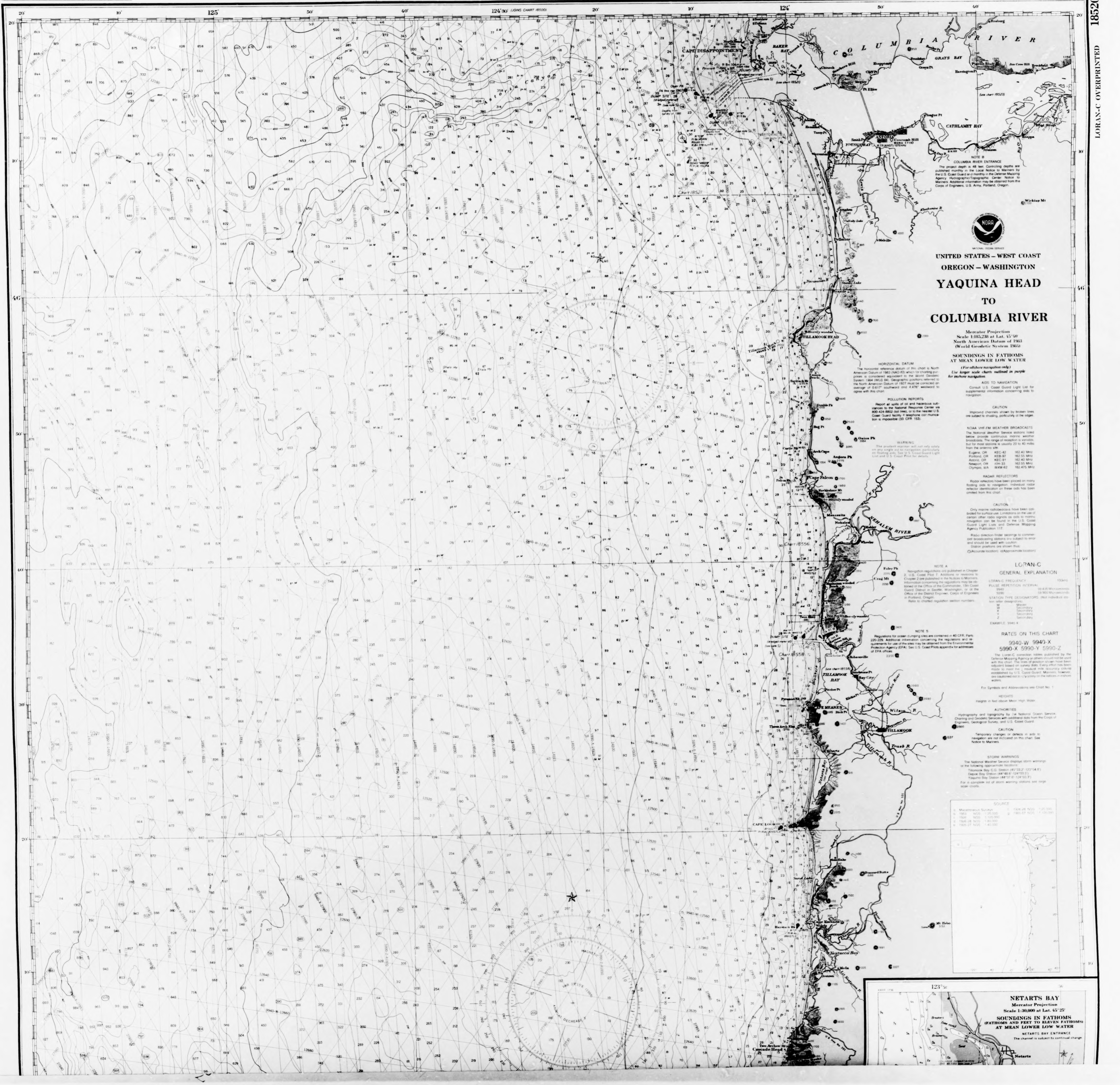
SOUNDINGS IN FATHOMS

Nautical Chart Catalog No. 2, Panels C,F,G,K,R

Formerly C&GS 5902, 1st Ed., Nov. 1920 KAPP 1735

18520

LORAN-C OVERPRINTED



NOTE B
COLUMBIA RIVER ENTRANCE

The project depth is 48 feet. Controlling depths are published monthly in the Local Notice to Mariners by the U.S. Coast Guard and monthly in the Defense Mapping Agency Hydrographic/Topographic Center Notice to Mariners. Additional information may be obtained from the Corps of Engineers, U.S. Army, Portland, Oregon.

NATIONAL OCEAN SERVICE

UNITED STATES – WEST COAST
OREGON – WASHINGTON

YAQUINA HEAD
TO
COLUMBIA RIVER

Mercator Projection
Scale 1:185,238 at Lat. 45°40'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER

(For offshore navigation only)
Use larger scale charts outlined in purple for inshore navigation.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.617" southward and 4.476" westward to agree with this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

NOAA VHF-FM WEATHER BROADCASTS

The National Weather Service stations listed below provide continuous marine weather broadcasts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Eugene, OR	KEC-42	162.40 MHz
Portland, OR	KEB-97	162.55 MHz
Astoria, OR	KEC-91	162.40 MHz
Newport, OR	KIH-33	162.55 MHz
Olympia, WA	WXM-62	162.475 MHz

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

Only marine radiobeacons have been calibrated for surface use. Limitations on the use of certain other radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and Defense Mapping Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Washington, or at the Office of the District Engineer, Corps of Engineers in Portland, Oregon.

Refer to charted regulation section numbers.

NOTE S

Regulations for ocean dumping sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices.

LORAN-C
GENERAL EXPLANATION

LORAN-C FREQUENCY	100kHz
PULSE REPETITION INTERVAL	
9940	99,400 Microseconds
5990	59,900 Microseconds

STATION TYPE DESIGNATORS (Not individual station letter designators)

M	Master
W	Secondary
X	Secondary
Y	Secondary
Z	Secondary

EXAMPLE: 9940-X

RATES ON THIS CHART

9940-W 9940-X
5990-X 5990-Y 5990-Z

The Loran-C correction tables published by the Defense Mapping Agency or others should not be used with this chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by U.S. Coast Guard. Mariners, however, are cautioned not to rely solely on the lattices in inshore waters.

For Symbols and Abbreviations see Chart No. 1

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Charting and Geodetic Services with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Notice to Mariners.

STORM WARNINGS

The National Weather Service displays storm warnings at the following approximate locations:

Tillamook Bay C.G. Station (45°33.2'-123°54.8')
Depoe Bay Station (44°48.6'-124°03.5')
Yaquina Bay Station (44°37.6'-124°03.3')

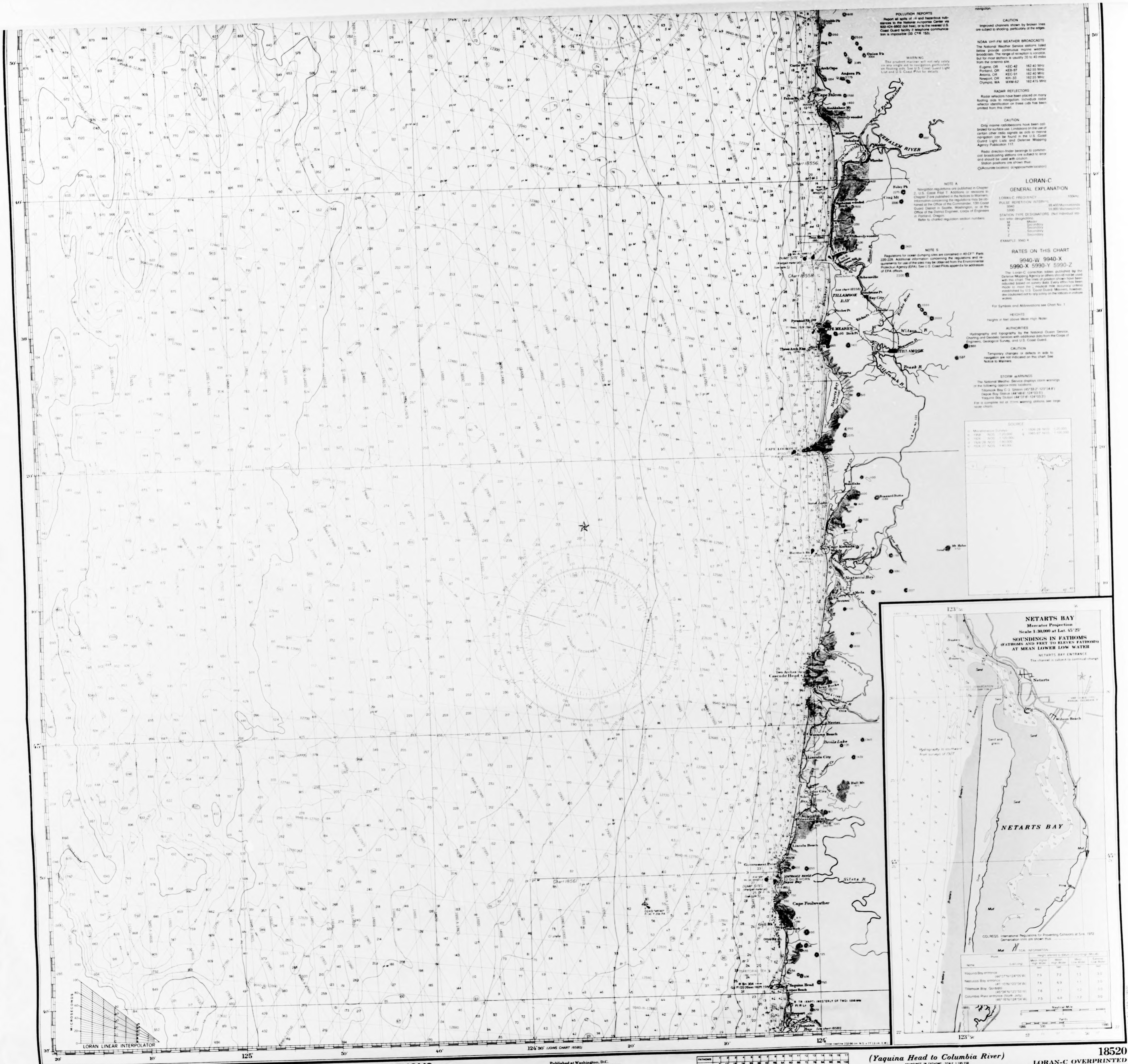
For a complete list of storm warning stations see large scale charts.

SOURCE

a	Miscellaneous Surveys		
b	1953	NOS	1:20,000
c	1926	NOS	1:120,000
d	1926-28	NOS	1:80,000
e	1926-27	NOS	1:40,000
f	1926-28	NOS	1:20,000
g	1985-87	NOS	1:100,000

NETARTS BAY
Mercator Projection
Scale 1:30,000 at Lat. 45°25'
SOUNDINGS IN FATHOMS
(FATHOMS AND FEET TO ELEVEN FATHOMS)
AT MEAN LOWER LOW WATER

NETARTS BAY ENTRANCE
The channel is subject to continual change



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SOURCE

NETARTS BAY

Mercator Projection
Scale 1:30,000 at Lat. 45°25'

SOUNDINGS IN FATHOMS
(FATHOMS AND FEET TO ELEVEN FATHOMS)
AT MEAN LOWER LOW WATER

NETARTS BAY ENTRANCE
The channel is subject to continual change

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus: — — — —

TIDAL INFORMATION

Place		Height referred to datum of soundings (MLLW)			
Name	(Lat/Long)	Mean Higher High Water	Mean High Water	Mean Low Water	Extreme Low Water
		feet	feet	feet	feet
Yaquina Bay entrance	(44°37'N/124°05'W)	7.9	7.2	1.3	3.0
Nestucca Bay entrance	(45°10'N/123°58'W)	7.6	6.9	1.1	3.0
Tillamook Bay, Garibaldi	(45°34'N/123°55'W)	7.8	7.1	1.2	3.0
Columbia River entrance (North Jetty)	(46°16'N/124°04'W)	7.5	6.8	1.2	3.0

18th Ed., Apr. 8/89

18520
LORAN-C OVERPRINTED

CAUTION

This chart has been corrected from the Notice to Mariners published weekly by the Defense Mapping Agency Hydrographic/Topographic Center and the Local Notice to Mariners issued periodically by each U.S. Coast Guard district to the date shown in the lower left hand corner.

SOUNDINGS IN FATHOMS

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102

(Yaquina Head to Columbia River)
SOUNDINGS IN FATHOMS - SCALE 1:185,238

18520
LORAN-C OVERPRINTED

C55.418/7:18520